

IN THE CLAIMS

Please cancel claims 1-5 without prejudice or disclaimer of subject matter.

Please add new claims 6-25.

1-5. (Cancelled)

6. (New) An image heating apparatus comprising:

a coil for generating magnetic flux;

a heat generating member, including a heat generation layer which generates heat by the magnetic flux from said coil, for heating an image on a recording material; and

control means for controlling energization to said coil so that a temperature of said heat generating member is an image heating temperature for heating the image on the recording material,

wherein said heat generating member has a Curie temperature which is higher than the image heating temperature and is lower than a heat-resistant temperature of said image heating apparatus, and

wherein a thickness of said heat generation layer at its center portion is smaller than a thickness of said heat generation layer at its end portion, and the thickness of said heat generation layer at its end portion is larger than a skin depth at the Curie temperature.

7. (New) An apparatus according to Claim 6, wherein the thickness of said heat generation layer at its center portion is smaller than the skin depth at the Curie temperature.

8. (New) An apparatus according to Claim 6, wherein the thickness of said heat generation layer at its center portion is larger than the skin depth at the image heating temperature.

9. (New) An apparatus according to Claim 6, further comprising a power source for supplying a high-frequency current to said coil, the high-frequency current having a frequency of 10 kHz - 100kHz.

10. (New) An apparatus according to Claim 6, wherein said heat generating member is a roller.

11. (New) An apparatus according to Claim 10, wherein the roller has an inner diameter at its end portion that is smaller than an inner diameter of the roller at its center portion.

12. (New) An apparatus according to Claim 10, wherein the roller has an outer diameter at its end portion that is larger than an outer diameter of the roller at its center portion.

13. (New) An apparatus according to Claim 6, wherein said heat generating member is a belt.

14. (New) An apparatus according to Claim 6, further comprising a temperature detecting member for detecting the temperature of said heat generating member, said control

means controlling energization to said coil depending on an output of said temperature detecting member.

15. (New) An apparatus according to Claim 6, wherein said image heating apparatus further comprises a coil unit including said coil, said coil unit being provided inside said heat generating member.

16. (New) An image heating apparatus comprising:
a coil for generating magnetic flux;
a heat generating member, including a heat generating layer which generates heat by the magnetic flux from said coil, for heating an image on a recording material; and
control means for controlling energization to said coil so that a temperature of said heat generating member is an image heating temperature for heating the image on the recording material,
wherein said heat generating member has a Curie temperature which is higher than the image heating temperature and is lower than a heat-resistant temperature of said image heating apparatus, and
wherein a thickness of said heat generating layer at its center portion is smaller than a skin depth at the Curie temperature, and a thickness of said heat generation layer at its end portion is larger than the thickness of said heat generating layer at its center portion.

17. (New) An apparatus according to Claim 16, wherein the thickness of said heat generating layer at its end portion is larger than the skin depth at the Curie temperature.

18. (New) An apparatus according to Claim 16, wherein the thickness of said heat generation layer at its center portion is larger than the skin depth at the image heating temperature.

19. (New) An apparatus according to Claim 16, further comprising a power source for supplying a high-frequency current to said coil, the high-frequency current having a frequency of 10 kHz-100kHz.

20. (New) An apparatus according to Claim 16, wherein said heat generating member is a roller.

21. (New) An apparatus according to Claim 20, wherein the roller has an inner diameter at its end portion is smaller than an inner diameter of the roller at its center portion.

22. (New) An apparatus according to Claim 20, wherein the roller has an outer diameter at its portion is larger than an outer diameter of the roller at its center portion.

23. (New) An apparatus according to Claim 16, wherein said heat generating member is a belt.

24. (New) An apparatus according to Claim 16, further comprising a temperature detecting member for detecting the temperature of said heat generating member, said control

means controlling energization to said coil depending on an output of said temperature detecting member.

25. (New) An apparatus according to Claim 16, further comprising a coil unit including said coil, said coil unit being provided inside said heat generating member.